

CHAMPIONSHIP FOOTBALL GAME BETWEEN THE TECH AND VOO DOO ENDS 0 TO 0

PUBLICATIONS TIE IN BATTLE FOR PI DELTA EPSILON CUP

Hard Fought Game Featured
By Line Plunges and End
Runs by Backs

DELAY IN STARTING GAME

Playing for the championship of Technology's undergraduate publications THE TECH's football team tied with Voo Doo, the game ending with neither team being able to score a point. This was a disappointment to many as the new Phi Delta Epsilon silver loving cup was to be awarded the winner.

For the first time the winners of the annual Voo Doo-T. E. N. and THE TECH-Technique games fought for the honor of winning the championship and the new cup. The game was played on Tech field last Wednesday afternoon and due to a preliminary game between two outside schools the

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Officer of Peace Council to Speak

With the London Naval Conference only a month away, Frederick J. Libby, Secretary of the National Council for Prevention of War, will speak to the members and guests of the M. I. T. Liberal Club tomorrow afternoon at 4 o'clock in Room 4-270.

The topic of discussion for the afternoon's talk and discussion will be, "The Problems Facing the London Naval Conference," and all members of the faculty and student body are invited by the Liberal Club to attend the meeting.

Long identified with peace movements of all kinds, Frederick J. Libby has had, as Secretary of the National Council, a special opportunity to investigate the leading disarmament and peace movements of recent times.

In view of the important events of the past months which will probably influence the outcome of the London Conference, it is expected that the speaker of the afternoon will deal extensively with at least two of these recent peace movements, the visit of Ramsey MacDonald, British Premier, to President Hoover, and the Armistice Day Address given by President Hoover to the American people.

VARSITY BOOTERS TIE FRESHMEN IN LAST GAME 2 TO 2

Freshmen Lead to Last Period
—Heavy Wind Prevents
Long Shots

BOTH TEAMS PLAY SHORT

In their last game of the season, the Varsity soccer team tied the freshmen 2 to 2 last Saturday afternoon on the Coop Field, after trailing the yearlings into the second half. Due to the fact that several members of both teams failed to appear, the game was played with eight men on a side. A heavy west wind kept the ball on the east side of the field, and made the forwards' shots inaccurate, but in spite of the inclement weather both teams played a good game, the frosh leading up to the last few minutes of play.

Freshmen Score

In the first period the yearlings seemed to have the ball most of the time, and their forwards made several attempts at the net which were stopped by Ayres, playing goal for the Varsity. After about fifteen minutes of scrimmage, the yearlings were able to make the first score of the game, when Lovejoy sent the ball past Ayres into the net. Bateman, who was playing in the defense line for the frosh played an excellent game, showing a great deal of ability. Cooper, who played opposite Bateman, also played a sterling game against the freshmen.

Frosh Lead 2-0

Scoring again in the second period, the freshmen led 2 to 0 at the half, when Flint, freshman forward, sent the ball into the goal for the second yearling score. The Varsity made several attempts this quarter for a score but they were successfully stopped by Mayer, who guarded the yearling goal.

Varsity Rallies

Rallying in the third, Fragiaco sent the ball by Mayer on a corner kick from Youngson for the first Varsity score. With the score 2 to 1, the quarter ended, neither team being able

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DR. KENNELLY TO ADDRESS FACULTY

Harvard Professor of Electrical
Engineering Speaks on
Racing Records

Members of the M. I. T. Faculty will gather for a luncheon meeting Wednesday noon in the Faculty Dining Room of Walker. The speaker at this week's meeting will be Professor A. E. Kennelly, Sc.D., who will speak on the subject "World's Records of Racing."

Dr. Kennelly is at present Professor of Electrical Engineering and Director of Electrical Engineering Research at Harvard University, and he has had an unusually interesting and varied career. He was born in India, and educated in England and Scotland. At one time he was principal electrical assistant to Thomas A. Edison. He has been honored by many leading universities, is an exchange professor, and the recipient of numerous honors and awards. Dr. Kennelly has also served as a member of the M. I. T. faculty.

ALDRED LECTURES TO COMMENCE ON FRIDAY

Well-Known Architect Will
Give First Address of Series

Mr. Ralph Adams Cram, well-known architect, will be the speaker at the first Aldred Lecture this fall, to be given Friday afternoon at 3 o'clock in 10-250. "The Building of a Great Cathedral" will be the subject of his illustrated address, which will deal with the design and construction of the Cathedral of St. John the Divine in New York City.

Mr. Cram is well known in architectural circles, not only for his work on the design of the cathedral, but for his supervision of the design of the buildings at Princeton University. He has also written many books on subjects relating to architecture, and is highly regarded as a speaker.

These lectures are open to Seniors, Graduates, and Officers of Instruction.

One-More-Day Petition In Need of Signatures

Technology students who desire another day at home during the Christmas vacation should sign the petition in the Main Lobby or the one in Walker Memorial at once. Thus far, only a few over a thousand signatures have been secured. In order to carry weight with the faculty the petition must have many more names than this, so if there are any men really interested, who have not yet signed, they should not neglect to do so. The petition must be presented to the Faculty by Wednesday of this week, in order to afford sufficient time for its consideration.

A. I. E. E. Holds Third Dinner of Series Thursday

Edison Representative to Speak
On Electric Power
Distribution

For the third time this year, the members of the Student Branch of the A. I. E. E. and all freshmen and Sophomores enrolled in electrical courses will meet at a dinner meeting to be held on Thursday evening at 6 o'clock in the North Hall of Walker. A fried chicken dinner will be served to those present.

Immediately following the dinner, the gathering will adjourn to the Main Hall, where Mr. Edward S. Mansfield '96, of the Edison Electric Illuminating Co. of Boston, will address the group on the subject of the opportunities offered the engineering graduate in the field of the generation and distribution of electric power. At the conclusion of the talk there will be shown a moving picture illustrating some of the typical projects in this field.

The meeting is expected to prove instructive to all interested in electrical engineering, and particularly to the members of the two lower classes, as it will give them an insight into the electrical work for which their training at the Institute is a preparation.

All men who plan to attend the meeting must secure a card of admission from any member of the executive committee or from Room 4-203 before Wednesday.

TICKETS FOR XMAS DANCE NOW ON SALE

Annual Concert of Musical
Club Will Be Held Friday

Tickets for the annual Christmas Concert and Dance of the Combined Musical Clubs, which will be held on Friday evening at 8 o'clock at Longwood Towers, Brookline, are now on sale in the Main Lobby from 12 to 2 o'clock each day. The admission price is \$1 per couple and \$3 stag.

This concert, the finale of the pre-Christmas season, will be the first undergraduate appearance of the clubs this year. Each of the individual clubs will present a number of selections, and a specialty act is included, which it is hoped will prove entertaining. The complete program will appear in an early issue of THE TECH.

FRESHMEN ELECTED TO HONOR SOCIETY

Quadrangle Club Announces
New Men Chosen as Members

Twenty members of the Class of 1933 were elected to the Quadrangle Club, the Sophomore-freshman honorary society, at a meeting held last Tuesday night at the Phi Gamma Delta House. Information as to the time of the initiation and further activities will be made public at a later date.

The following new members were elected: David L. Babcock, Walter C. Backus, Charles W. Ball, Charles C. Bell, Anton H. Brockelman, Thomas M. Chadwick, Charles V. Case, Jr., Edward L. Dame, Paul E. Davis, Jr., George W. Denison, Walter R. Duncan, Pierre S. du Pont, III, Samuel B. Farnum, Jr., Wilber B. Huston, William W. Laird, Jr., Herbert M. Larabee, Jr., David R. McGregor, Leland S. Person, John W. Regan, Jr., Robert M. Trimble.

ARTHUR WHITING BEGINS CONCERT SERIES TOMORROW

Corporation Arranges Fifth
Series of Recitals By
Noted Musician

STUDENT BODY INVITED

Phases and Trends of Musical
Thought and Development
Illustrated

Mr. Arthur Whiting, one of the leading interpreters of modern music, will present a recital from the works of various music masters to the members of the Corporation, the Faculty, their families, and the students of Technology in Room 10-250 tomorrow evening at 8:15 o'clock. He will be assisted by four accompanying artists in presenting the concert which will be the first for this year.

In co-operation with the Institute Mr. Whiting has already presented four series of concerts during the last four years. As in previous years the program is designed to illustrate certain phases and trends of musical thought and development, since the earliest period.

Flutist to Assist

George Barrere, one of the leading flute players of the country, will assist in the recital along with Miss Mariana Lowell, Violin; Miss Genieve Hugel, Violoncello; with Mr. Whiting at the Harpsichord. Mr. Whiting uses the harpsichord, a fifteenth century instrument, to better interpret Handel, Mozart and other composers.

Mr. Whiting is associated with the Chamber of Music in New York City and makes tours to various institutions throughout the country. Before coming to Technology he appeared at Yale University and from Technology

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TECHNOLOGY REVIEW ON SALE TOMORROW

Research and Labor Problem
Is Subject of Main Story

Technology Review for December will be on sale tomorrow in the Main Lobby and will be an unusually varied issue. "Research and Labor" is one of the main articles in the Review and in it Arthur D. Little '35 gives a general survey of the problems connected with employing men for research purposes. He tries to show how an effective cooperation and organization of the research work and the workers can be made to produce remarkable results.

Thomas Tallmadge '98 discusses the evolution of the American skyscraper and its effects on the architecture of the rest of the world. He gives an idea as to the future trend of large buildings in the article which is entitled "Terraces and Towers." James J. Rolands, who is in charge of the news service at M. I. T., has contributed a story in which he shows how science has aided the newspaper world. He gives an idea of the work necessary in news communication and in setting up the paper made possible by scientific achievements. Alumni news, notes, and other articles complete the December number.

Telegraph Company Uses Class-to-Class Canvass

Competition is evidently keen between the two great telegraph companies. No sooner had one established a temporary station in the basement of Walker for the convenience of those who wished to send Thanksgiving telegrams home, than the other retaliated with a class-to-class solicitation.

Last Wednesday, as a certain young chemistry instructor was holding forth on the intricacies of the preparation of HCl, the door opened, and a young and uniformed employe of the rival company appeared. Removing his cap and coming to attention, he inquired, in a high-pitched voice, "Want to send a Thanksgiving message home?" On being given a negative answer, he retired in good order, followed by the blushes of the instructor and the roars of the class.

Who's Who Among The Alumni

A recent inquiry at the Personnel Office regarding the success in business of Tech men has suggested that the parts played by Tech graduates in the workaday world should be better known.

Colonel Locke, Personnel Director, says that in looking through the records of Alumni filed in his office one is impressed by the large number of our graduates who are holding important posts in industry and in public service. It is of interest too to note the large num-

ber of men specially trained for science and engineering who are found holding high executive positions in almost every field of business and public affairs.

Believing that wider knowledge of what Technology graduates are doing would be of special interest to our readers, THE TECH will print from time to time a brief sketch of some prominent alumni. These sketches should be not only of interest to undergraduates, but also a source of inspiration. Watch for them.

Invention of Coolidge Cathode Ray Tube Has Developed Many Sciences

Member of Institute Staff Aids
Analyses in Chemistry
and Physics

Dr. William D. Coolidge '96, former member of the Institute staff and now Assistant Director of the General Electric Laboratories at Schenectady is widely known for his experiments with cathode and roentgen rays. As the inventor of the Coolidge X-ray tube he has opened the way to further research in many sciences.

In seeking for a method to produce cathode rays behind the walls of glass Mr. Coolidge developed a bulb of a high vacuum, at one end of which he inserted an aluminum window. Though this very thin disk passed the rapidly moving particles or cathode rays and thus the first radiations of this nature were deliberately harnessed by man.

Rays Thrown Eighteen Inches

With this comparatively crude apparatus, operating under a potential of 250,000 volts and a current of several thousandths of an ampere, it was possible to project the rays a distance of about 18 inches from the tube, a feat which had never before been accomplished. Starting with the observation of the effects of the rays upon various crystals a new means of chemical and physical analysis was soon afforded by Dr. Coolidge. Microscopic examinations of different chemicals showed minute craters and canals which have since been identified as characteristic of certain substances. Extremely small quantities of an element can be detected by the characteristic spectrum produced, by the x-ray radiations.

Sensational Effects Produced

Striking effects of many kinds have been produced with the rays from Dr. Coolidge's tube. Placed in their

path acetylene gas solidifies, wax receives an electric charge, calcite glows with a cold yellow light, rats and insects die, and castor oil becomes a solid. It is said that an exposure of a tenth of a second killed highly resistant bacterial spores and flies placed in the rays died after a few hours.

The production of a tungsten filament lamp by Dr. Coolidge made possible his later experiments with cathode and roentgen rays. For a long time scientists had realized the great waste of energy attending the use of the carbon incandescent lamps but declared that tungsten was forever a brittle element and could not be drawn into a flexible wire. In the face of this disbelief even on the part of his associates Dr. Coolidge finally succeeded in drawing the tungsten into wire and in using it shortly afterwards in his famous tube.

To what extent the principles embodied in Coolidge's tube may be utilized for the production of a powerful germicide in medicine remains to be determined from further experiments. The first portable apparatus of its kind it permitted the use of far higher voltage than had ever before been used. It is said that the device produces rays in greater intensity than could be obtained with a ton of radium were it available.

Receives Nobel Prize

Dr. Coolidge graduated from the Electrical Engineering Department of the Institute and shortly after his graduation was Assistant Professor of Physical and Chemical Research. He holds membership in many scientific societies, including honorary membership in the American Roentgen Ray Society. He received the Hughes Medal from the Royal Society in London and was later awarded the Nobel Prize for his work in cathode rays.

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UNORIGINAL SCIENTISTS

FROM the time of Aristotle down to the present day the problem of the scope of science has constantly troubled great thinkers. Who can tell where philosophy leaves off and where science begins? May the "social sciences" be truly termed sciences? Can the popularization of scientific principles be called a branch of scientific endeavor, or is it merely art in the literary sense? True science is restricted to extremely limited bounds.

Science exists to answer questions that are put forth by thinkers of a more imaginative turn of mind, according to the philosophers. Once the specific question is answered, the scientist then returns to his burrow and leaves it to the artist to discover its significance and apply it to life. Will Durant divides the process of addition of new thought to our lives into three stages.

Science seems always to advance, while philosophy seems always to lose ground. Every science begins as a philosophy and ends as an art; it arises in hypothesis and flows to achievement. Science is the captured territory; and behind it are those secure regions in which knowledge and art build our imperfect and marvelous world.

The belief that science asks its own questions is a fallacy. Philosophy takes this initiative, and makes conjectures. Scornful of this method, the scientist seeks the truth in his laboratory, and does not rest easy until he has satisfied himself that his task is ended. Here his imagination fails him, and he leaves others to apply his discovery to good or evil usage. The true scientist is not cognizant of good or evil; his problem is that of truth and falsity.

According to Mr. Durant's conception of science, all the great inventors, all the men who have applied science to make life worth while, are not scientists. They are artists, and the bases of their discoveries are taken from facts long since verified and abandoned by the unoriginal, plodding scientist.

SQUARE PEGS

"On broad lines and with necessary qualifications it can be said that there are four classes of college students who suffer most from the mass production methods which American colleges have necessarily adopted to fit their students for their places in a mass production world.

1. The true scholars—those who have a passion to go exploring in the world of ideas tracing down the lost, mislaid and undiscovered facts pertaining to some particular subjects.

2. The adventurers—those who long to be off to explore the material world in airplanes, sailboats, and dog sleds, following the four winds and sitting beside each of the seven seas.

3. The artisans—those who are happiest when they are at work with their hands at tangible things in farms, forests, laboratories and workshops.

4. The artists—those who take joy in working with true colors, fragile harmonies and graceful lines, striving after perfection in the creative arts.

It is to these students that the institutional training furnished by our colleges may be particularly harmful."

SUCH is the statement of William T. Nichols in a recent Atlantic Monthly. Mr. Nichols is perhaps right when he says that these students suffer from mass production methods and find college an environment totally unsympathetic to them. It is apparent at once, however, that each of these classes in this day and age must have every tool at its fingertips if success is to be obtained. Could a lost fact be discovered without a deep knowledge of the known ones? Today's exploration trips are in reality gigantic laboratory experiments. Farming is a science, not a hay-making proposition exclusively.

Even the artists are dependent upon their tools if they are to measure with their contemporaries. All in all the present day methods of instruction are by far the best the educators have been able to produce. The next generation will perhaps acquire their "book learning" by methods too strange for us ever to conceive as possible.

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TECHNOLOGY CLOSES SCHEDULE FOR 1929 IN CROSS COUNTRY

With the approach of cold weather the Technology cross-country season comes to a close. The Varsity and freshman squads took part in two dual meets, winning the first and losing the second by a narrow margin. In addition to this, they made their usual good showing in the annual N. E. I. C. A. A. run at Franklin Park and I. C. A. A. A. event at New York. Captain Leon Thorsen led his men through the season in fine style, and did much to aid Coach Hedlund in building up some excellent material for next fall.

Good Prospects

With the exception of Thorsen, Herbert, and Berry, the members of the present team will return next year to form one of the most promising teams in several years. Gilman, who is a Sophomore, showed a great improvement over his work of the 1928 season, and ran consistently second to the captain. The other men who, from their past experience, should make up a nucleus for the team of 1930 are Baltzer, McSheehy, Fisk, Albright, McNiff, and Littlefield of the present Varsity, and MacKay, Kessler, Stalter, and Payne of the freshmen.

An Early Start

A large number of men reported for the team and began training as soon as the Institute year started. Things looked good for the approaching season, and the squad got rapidly into prime condition for the opening meet with Holy Cross. The freshman candidates included a number of men who had run cross-country in high or prep school and had a good knowledge of the sport. The Varsity team was crippled early in the year when McNiff received an injury to his foot shortly before the Holy Cross meet.

Win First Meet

The Varsity harriers lined up against the Crusaders on October 25. This team had been defeated by Harvard earlier in the season, and it looked like a close meet, with a struggle for first honors between Captain Thorsen and Brennan of Holy Cross.

This race was won by Brennan in the fast time of 23:24 4/5. Don Gilman of the Engineers ran a very good race and finished in a dead heat for second place with Captain Thorsen, after the manner of the famous Lindsay-Richardson combination of the Maine harriers. The fine teamwork of the Technology runners was shown again when Berry, Baltzer, and McSheehy crossed the line in a tie for fifth place. Close behind them came Track Manager Jim Fisk, running his first cross-country race. Albright, in ninth position, completed the scoring for the Varsity, with a win of 23 to 39 over the Purple Crusaders.

Freshmen Run Well

Again in the freshman race the Engineers won as a team, but lost first place in the individual scoring to the opposing runners. The yearlings won by a score of 24 to 31, although the first man to cross the line was Blake of Holy Cross. McKay led the Beaver runners and finished in second place. Third was taken by Holy Cross, and the next four places were won by Captain Masters, Kessler, Payne, and Stalter of Technology. Burdick, Bell, and Russett were the other Engineers to finish. This was the first time that the Technology freshmen had defeated Holy Cross in this sport.

Handicap Run Held

On November 2 the second annual open handicap run was held, and the best time was made by Captain Thorsen, finishing in a dead heat for first with Gilman, who had a handicap of ten seconds. Thorsen ran the 6000-yard course in 17:42. The other men who led the field across the line were Littlefield, Berry, and Baltzer in that order. The features of this meet were the fine running of Gilman, and the large number of men who participated.

Lose to Wildcats

The Varsity team received a setback in the New Hampshire meet on November 9, when they lost to the Wildcats by one point, 27 to 28. Thorsen again took a second place, losing out in the final mile to Hazen of New Hampshire. He ran the course in 28:01 3/5. Thorsen and Gilman led the field for five miles, when Hazen drew up from fifth place to cross the line a winner by 15 yards. Gilman took third in the race, while Baltzer placed fifth, following Lazure of the Wildcats. McSheehy, Berry, McNiff, Herbert, Albright, Fisk, and Littlefield were the other Engineers to score.

Freshmen Lose

The freshman race was very one-sided, and the Beaver yearlings lost

FROSH HOLD VARSITY BOOTERS TO 2-2 TIE

Varsity Trail First-Year Men Up to Third Period

(Continued from Page 1)
to get the ball into the net. The upperclassmen scored again in the last period on Kashemsanta's kick into the net, to tie the score. With only 15 minutes left to play, the yearlings tried to break the tie, but they seemed a little tired, and lacked the stamina to score against the more experienced team. The lineups of the teams were as follows:

M. I. T. Varsity	M. I. T. Freshmen
Wyman, goal	goal Mayer
Hawkins, rfb	rfb, Haas
Riehl, lfb	lfb, Mohr
Cooper, chb	chb, Bateman
Ryan, ol	ol, Flint
Youngson, center	center, Way
Fragiacomo, ir	ir, MacCormack
Kashemsanta, il	il, Lovejoy

The Lehigh "Brown and White" denounces editorially the present type of movie films depicting college life, for representing college as a "glorified kindergarten". "The students never go to classes but wander continually about the campus with co-eds. There is always a villain, a comedian, a dumbbell, and a little wizened fellow with numerous books, but never a human professor or a serious student-athlete".

Thought transmission is not a common attribute, but the men students of Rochester university are rapidly approaching perfection in this line. Being of the opinion that the average collegian wastes a great deal of time on blind dates, the boys have invented a code for the exchange of knowledge concerning co-eds. The telephone directory is duly annotated according to the following classification: A, average; B, beautiful; K, kisses; L, liberal; M, mercenary; P, pippin; R, rough; T, tells; V, vivacious; X, expensive; Y, the unknown quantity. With such a system in use there is no excuse for one not having an enjoyable evening.

by a score of 19 to 38. The event was very loosely run, and the men were widely scattered at the two-mile mark. Masters, the first to finish for M. I. T., was in third place, following De Moulpied and Roberge of New Hampshire. McKay and Kessler, the next two Engineers to finish, were in seventh and eighth places.

Third in N. E. I. C. A. A.

On November 20 the Varsity harriers entered the New England at Franklin Park and made a very good showing, finishing in third place. First and second were won by two colleges from the Pine Tree state, Bates and University of Maine respectively. Captain Thorsen and Don Gilman ran in their usual relative positions, taking ninth and thirteenth for the Engineers. McSheehy and McNiff completed the Technology scoring, winning 28th and 34th.

Richardson and Lindsay of Maine, running in their usual brotherly manner, finished in a tie for first. Third place was won by Hazen of New Hampshire. Technology made a low score as a team, and came out ahead of New Hampshire, the winner of the dual two weeks previous. The scores of the winning teams were; Bates, 30; Maine, 52; Technology, 107; New Hampshire, 121; Northeastern, 164. There were eleven teams in the meet.

Freshmen Win Third

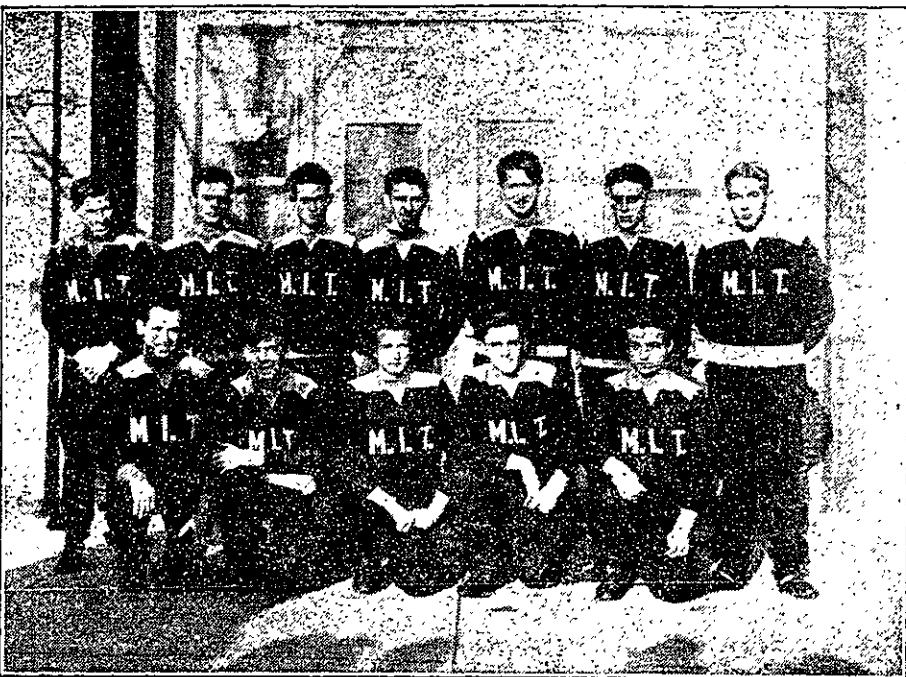
The Engineer yearlings also took third place in the New England, following New Hampshire and Bates. Captain Masters, in sixth place, was the first to finish for the Cardinal and Gray. McKay, Payne, Damon, Stalter, and Kessler took eighth, fourteenth, twenty-first, and twenty-sixth respectively. The leading scores among the seven entrants were New Hampshire, 57; Bates, 67; Technology, 73; Tufts, 85.

Run in I. C. A. A. A.

Last Monday the Varsity and freshman teams went to Van Cortlandt Park in New York for the national intercollegiate run. Here the Varsity placed eleventh among the 19 teams that ran, while the freshmen took tenth among eleven entrants. Captain Thorsen was forced to retire from the race when he was injured in passing the hurdle at the two-mile mark. He lost considerable time before he was able to continue the running and finished back in 68th place, while Gilman took 30th for the Engineers. First place was taken by Pennsylvania, and second by Michigan State.

The first freshman to finish was McKay, in 22nd place. He was followed by Masters and Kessler, in 35th and 51st. New York U. won the lowest score which was one-half that of Cornell, the second place winners.

1929 Varsity Harriers



Standing: Herbert, Berry, Albright, Captain Thorsen, Baltzer, McSheehy, Moody.—Kneeling: Kallielis, McNiff, Fisk, Gilman, Littlefield.

Sports Desk

At present the Technology athletic teams are passing through the annual pre-winter lull. With the close of the season in soccer, track, tennis, and cross-country, interest is swinging toward the popular indoor sports of the cold months. The teams are all well started on their practice schedule, and within two weeks things will begin to look lively again.

The Varsity basketball team will start off on its schedule of thirteen games when the Cardinal and Gray quintet will meet New Bedford in the Hangar Saturday evening. Captain Nelson and his men have been getting into shape for the initial game and promise to open the season in proper style. The Engineers look good this year, and it seems like an easy win for them. The following Wednesday they will be hosts to the Brown University squad.

The program for the cagemen is an excellent one this year, and the interest that is beginning to crop out around the Institute is an indication of some big times in the Hangar before the winter is over. The Dorns always show a great deal of spirit in following up the team, even to the extent of organized cheering. If the rest of the students would show a little better attendance, they would be doing a good thing for a worthwhile cause.

In the Hangar this winter the basketball fans will have the opportunity of seeing such teams as Newport Naval Training School, Norwich, Middlebury, Lowell Textile, Maine, New Hampshire, New York U., and Brooklyn Polytech in addition to New Bedford and Brown. The Beavers will meet the Crimson five at Harvard this season on December 18. This promises to be one of the big games of the year if the exhibition given at the Harvard scuffle last winter is a good indication. Let's go, everybody!

In about six weeks, on January 10 to be exact, the swimming team will make its debut, with Bowdoin as the opposition. Great things are expected of the mermen this year, and they seem quite capable of justifying the enthusiasm that is being demonstrated. They will be up against a schedule of ten meets, with the New England at Bowdoin on March 14 and 15 as their goal. Most of the meets will be outside of Boston, the only opponents to be met at home being Bowdoin, Amherst, and Wesleyan.

It is interesting to note that the National Collegiate Swimming Association will hold its annual meet this year at the dedication of Harvard's new pool on March 28 and 29. The tank is under construction and will be finished in February. The National Association comes to Cambridge upon the invitation of William J. Bingham, director of athletics at Harvard. The new building will have a seating capacity of 1500, and is being constructed at a cost of \$1,225,000.

The Technology Varsity wrestlers will make an early entrance into collegiate circles on December 18, when they will meet the B. U. Terriers. The matmen are progressing rapidly under the new system introduced by Coach Ricks, who comes to Technology for the first time this year. They have a schedule of 13 meets, the high lights being Harvard, Yale, Columbia, Northwestern, Springfield, Brown, and finally the New England on March 15. An intra-mural competition is being planned which will provide additional interest among the students.

The playing schedule of the Massachusetts Squash Racquets Association started Saturday. Technology has been habitually in last place in these matches during the past, but are now out to make a name for themselves under the direction of Coach Jack Summers. He seems to be putting new life into the sport at the Institute, and has already organized a squad that looks good. The Beavers have three teams in the league, in classes B, C, and D.

The Cross-country team will elect a captain for next year when the men gather today at 5 o'clock for a team picture. There are several good men on the squad who have shown running and leadership ability. They will all be with the team next year, and the choice of any one of them for captain is bound to be a good one.

In a publicity stunt and scheme to boost the circulation of the "Gogher," undergraduate yearbook of the students of the University of Minnesota, twelve chorus girls were hired to be on the campus for one hour and 15 minutes to kiss everybody who subscribed to the yearbook. Dean Nicholson did not permit the students to go through with their plan.

More than 500 members of the First Baptist Temple Sunday school in Youngstown, Ohio, recently combined to write the entire Bible in longhand in one day. Each of the 500 copied 50 verses. The whole is being bound.

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NOTICES - ANNOUNCEMENTS

Of General Interest

Whiting Concert

Room 10-250

Tuesday, December 3, 8:15 P. M.

The first Exposition of Classical and Modern Chamber Music for the 1929-1930 Season will be given by the following artists:

Mr. George Barrère, Flute
Miss Mariana Lowell, Violin
Miss Genevieve Hughel, Violoncello
Mr. Arthur Whiting, Harpsichord

Faculty Club Luncheon Meeting

Prof. A. E. Kennelly, Sc.D.

Tuesday, December 3, 12 M., Walker Memorial

Faculty Dining Room

Dr. Kennelly, Professor of Electrical Engineering and Director of Electrical Engineering Research at Harvard University, will speak on "World's Records of Racing."

Team Which Tied With Voo Doo in Battle for Pi Delta Epsilon Cup



THE TECH GRIDMEN

THE TECH-VOO DOO GAME ENDS IN TIE

Score Will Be Engraved on
Cup—Which Will Remain
On Exhibition

(Continued from page 1)
publication battle did not start until quite late.

THE TECH Kicks Off

The close proximity of Thanksgiving and the usual vacation-taking left the two teams with barely enough men to play. As it was however at 3 o'clock Captain Tui Houston's team kicked off to Voo Doo and the grid-iron classic was on. Voo Doo immediately started down the field but lost the ball on downs. Upon taking the offensive THE TECH opened up an aerial attack that proved very unsuccessful.

On the last down when an uncompleted forward pass went over the goal line it was returned to the twenty-

yard line in the possession of Voo Doo. By playing straight football and driving through the center of the line several first downs were made before the representatives of Phosphorus were forced to punt.

Half Ends Scoreless

Through the line drives of Huston and Kamy and the end runs of Smith and Roddy the newbies brought the ball well into the opposing territory before losing it. The first half ended thus with the score 0-0 and the ball in the middle of the field.

Upon returning to play the second half Voo Doo kicked off and Worden received the punt and ran it back for twenty-five yards. THE TECH started a concentrated drive down the field and seemed to be on the verge of making a touchdown but several consecutive fumbles lost the ball and Voo Doo started in.

Voo Doo threatened several times to score by making long runs but never did they come closer than the thirty-yard line. Let by Dickinson, Voo Doo back, the team made several large gains by ploughing through the middle of the TECH line. When it came to the point where either team threatened to score the opposing line held and the resulting score was 0-0.

Voo Doo Threatened

During the closing minutes of the game it looked as though Voo Doo would score since they made almost forty-yards on two or three plays. However, before they were able to get closer than the thirty-yard line, time was called and the game ended.

Since neither team won the game the tie score will be engraved on the Pi Delta Epsilon cup and neither publication will have the honor of keeping it in its possession for the coming year. However the cup will probably be placed in the show case on the second floor of Walker Memorial for exhibition.

Due to the delay in starting the time was cut down to four eight minute quarters instead of four ten minute quarters as originally planned. As it was, the game nearly ended in darkness.

The line-ups of the two teams were as follows:

Voo Doo	THE TECH
Carr, fb	fb, Kamy
Dickinson, qb	qb, Roddy
Teague, hb	hb, Houston
Anderson, lib	hb, Smith
Burr, re	re, Davis
Holden, rt	rt, Barker
Osterman, rg	rg, Fahnestock
Jarosh, c	c, Verveer
Burdick, lg	lg, Harmon
Harper, lt	lt, Worden
Rodge, le	le, Truax
Substitutes Voo Doo—Dwight, Sibbey, and Park. THE TECH—Fleming and Holst. Referee, Pattison. Headlinesman, Ladd.	

CROSS COUNTRY TEAMS

All members of both Varsity and freshman Cross Country teams are requested to report to Room 11-004, in the Homberg Infirmary basement, Monday, December 9, at 5 o'clock, for group pictures. Election of captain for next year's varsity team will be held at this time. Please bring uniforms.

FIRST OF WHITING CONCERTS PLANNED

Regular Series Given Each
Year at the Institute to
Commence

(Continued from page 1)
he will proceed to other institutions such as Harvard, Dartmouth and others.

About five of these concerts will be given this year and will come at intervals of about one month. The second recital at Technology is to be held Tuesday, January 7 at the same hour. The others will be announced later.

Tomorrow night's concert consists of the following musical numbers:
(Flute, Violin, Violoncello, Harpsichord)

- Purcell, 1685-1695
..... Golden Sonata, F Major
1. Largo-Allegro.
2. Adagio-Allegro.
(Harpsichord)

- Bach, 1685-1750
.....Prelude and Invention, C major
..... Polonaise, G major

- Handel, 1685-1759
.....Air and Variations, E major
"The Harmonious Blacksmith"
Mozart, 1756-1791 Alla Turca
(Flute)

- Gluck, 1714-1787
Airs and Dances from "Armide",
"Iphigenie en Aulide"—"Orfeo"
(Violoncello)

- Locatelli, 1693-1764.....Sonata, G, major
1. Allegro.
2. Adagio Minuetto
(Flute, Violin, Violoncello, Harpsichord)

- F. Couperin, 1688-1733
..... Concerts Royaux

1. Musette.
2. Sarabande.
3. Forlane en Rondeau.
Rameau, 1683-1764
1. Menuet.
2. L'Indis crete.
3. Tamborin.

WESTERN STUDENTS PLAN SPECIAL CAR

Leaves Boston at 3:00 P. M.
Arriving in Chicago
At 2:15 P. M.

An All-Technology Pullman leaving North Station at 3 o'clock, Friday, December 20 has been secured for the benefit of students who live in the Middle West, especially those living in Detroit and Chicago. This is adopted in the nature of an experiment this year, and if it is successful, an All-Technology Pullman for the Western students will become an annual event at Technology.

Through the courtesy of the Boston and Maine Railroad it is possible to secure reservations and tickets for this special car by signing up in the T. C. A. office. As ten reservations are needed to guarantee the car, students should sign up at once. However, those making reservations immediately will not have to purchase their tickets until December 18.

It will be possible to secure reservations and tickets for all other points reached by the Boston and Maine Railroad by leaving your requests in the T. C. A. office. Plans are being developed for the establishment of a regular Travel Bureau at the Institute where students may make reservations for any point in the United States, but it is not likely that this will be done this year.

All information concerning the schedule of this car has been posted on the T. C. A. bulletin board.

HARVARD DEFAULTS CHESS TEAM MATCH

Harvard, champions of the Metropolitan Chess League, defaulted to the Technology chess team by their non-appearance to play the match which was scheduled for Friday, November 29, at 8:30 o'clock in the East Lounge of the Walker Memorial Building. The members of the Institute team sat about and played one another the entire evening waiting for their opponents to appear. This match, if it is to be played, will take place some time in January.

MEN IN M. I. T. INFIRMARY

Friday Nov. 29
Barker, William H. '32
Bolanos, Juan J. '31
Butters, Harold A. Jr., '33
Merrill, James A. '30
Pickell, James M. '30
Serrano, Ricardo E. '33
At Brooks Hospital:
Nolph, James G. Jr. '33
At Homeopathic Hospital:
Huston, Wilber B. '33

Dana College with an enrollment of less than 100 students sent a choir on a European concert tour last year.

WRESTLING

There will be a meeting of all the varsity candidates for wrestling Wednesday at five o'clock in the Hangar gym. It is very important that all the candidates be present.

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